Buying a Ram.

We copy an article from the Ohio Farmer on this subject, not because there are many in the sheep raising business in this state, but because everything that is said applys equally well to any kind of stock. You can take the best native heifers or sows that you can get, and by using a pure bred male, of one breed, all the time you can soon build up a herd of either cattle or swine that will be valuable. But if you use a grade male because he is cheap you will not make any progress but will soon go back.

"I guess I have got to buy another ram this fall. The one I used last season failed me and I think a change advisable." "How are your lambs looking this season?" "Well, not as good as they were last season. For some reason, which I can't quite understand, the ram I used on my ewes last fall did not get lambs as thrifty and strong as those of the season before. I have given my flock just as good care and the pasture has been even better, but my lambs are not looking as well." "What kind of a ram did you use last fall?" "Well, very good. I'll tell you how I got him. Mr. Brooks over across the river used the ram a year ago and as he could not use him again, told me he would sell him cheap if I wanted him. I looked the ram over and bought him for $7. I did not like him at the time, but it was a bargain and I did not feel that I could afford to let it go by. I had to buy a ram any way and thought this one would do." "What breed was he?" "He showed strongly of Lincoln blood, but I guess he was a cross." "What kind of ewes did you use on him?" "Well, my ewes are pretty well bred Shropshire. I have been using Shropshire rams for the last ten years and while my flock is not pure bred, it shows Shropshire very strongly." "Why did you attempt crossing with a Lincoln?" "Well, I thought this ram was cheap so decided to run the risk."

The above substance of a conversation which I had recently with a neighbor of mine over the ram purchasing proposition. It illustrates the result of many flockmasters, who purchase cheap rams to head their flock, just because some one offers them a bargain. Such bargains result in scrambling over dollars after pennies. When considering the relative importance of the ram to profitable sheep raising, no farmer can afford to risk his annual flock income for the sake of a few dollars. My neighbor's condition is an excellent illustration of trying to buy a good article cheap. He is considered a good flockmaster, keeps a fine flock of some thirty-five breeding ewes of excellent grading, but he allowed himself to become entrapped from carelessness. We are all apt to fall into just such traps. We have still to learn that it is not always the price of a thing that tells the story, but rather what it is worth to us in return.

Too many flockmasters fall victims in attempting cross breeding. No other thing will handicap profitable sheep raising more than continuous cross breeding. There is no certainty about the work and it is really gambling with nature. You may win once, but your chances are slim compared with risks taken. The great drawback to cross breeding, is, that results vary to such a marked extent that what proves well in one instance results fatally in others. In other words there is no definite standard by which one may determine results. A great many flockmasters cross breed because from the first cross they evidently think they have effected improvement, but on the following crosses, if closely observed, the same results are not so apparent. The facts of the case are, the first cross does not effect permanent improvements, but simply changes conformation. The grading up process of animal life is naturally difficult enough at the best and only material of the highest quality should be used in the work.

A large number of flockmasters, when their flock is composed of blood of several different breeds, are unable to determine which breed to adhere to in buying a ram. There is no definite rule to determine this point. Study the different breeds and select the one that your class of animals conform to. So long as you are satisfied with that particular breed, stick to them. In this way you are able to breed out the weaker qualities and build up a stronger and healthier type of sheep. What our farms are mostly in need of today is flocks of years of successive breeding. Our English flockmasters are wiser shepherds in this respect. They long ago realized that by breeding sheep for successive years, they could effect permanent improvement. Let us American flockmasters profit by their experience and select our rams with the intention of effecting permanent improvement.

By-Products of Beef.

The Beef Packers do not depend entirely on the sale of the meat, from the animal they kill, for their profits. The following account from the American Cultivator, gives a very interesting account of by-products of beef.

When the slaughtering business first became established on a large scale there grew up in the vicinity of the packing plants independent establishments, the function of which was to handle the by-products collected from the packing houses as described in Commissioner Garfield's report on the beef industry. Glue works, fertilizer works, soap factories, oil and tallow works and the like were in a large measure separate from the slaughtering concerns. As the packing business became more concentrated in the hands of a few large companies, these gradually—but finally almost completely—took over the allied industries, effecting various important economies in such unification. At present the leading packers themselves carry the elaboration of almost every possible by-product to an advanced stage. For example, Armour & Co. now manufacture sandpaper, thus utilizing glue which they make.

The most valuable by-product derived from cattle is the hides, which are worth on the average about $6 per head. A great number of classes and grades of hides are distinguished, which differ considerably in value. The hides are salted and kept by the packers from two to six months, according to the state of the market. During this period the hides shrink in weight, the shrinkage averaging, roughly, one-sixth of the "green" weight.

Next in importance are the fats obtained from the abdominal region and from other parts of the animal Which do not constitute beef. At present the better fats, especially those which may readily be detached by cutting or pulling, are so largely destined for use as a constituent of butterine that they are known as butter fats. An average beef animal will produce from sixty to seventy-five pounds of such fat. By heating, oleo stock is first derived from these fats. This is nearly the same in constitution as ordinary prime tallow, and if the market for oleo products is much depressed tallow may be produced for sale instead of oleo stock. Otherwise the stock is subjected to powerful pressure, which separates the oleo oil from the stearin, both of which are standard marketable products. Some of the packers, however, use part of their oleo oil and stearin in manufacturing butterine, lard compounds and cooking oils.

A moderate quantity of tallow and grease of several grades is secured by cooking the heads, feet and other offal, but the quantity and value of fats of this character are much less than those of butter fats.

The third by-product of the beef animal, in order of importance, is the tongue, which is either sold fresh or more often is cured or canned. The leading packers ordinarly designate all parts of cattle, except the dressed-beef hides, butter fats and tongues, by the term "offal." Among the various articles constituting "offal," the liver, heart, sweetbreads "offal," the may be marketed without other treatment than trimming.

The other forms of offal require a much more extensive preparation in order to become satisfactorily marketable. From the heads are cut the cheek meats and other small bits of meat, and sometimes the lips, these meats being usually sent to the sausage department. One or two of the packers use parts of the horns and leg bones of the cattle slaughtered in the manufacture of various novelties. Otherwise these materials are sold to the outside concerns for that purpose. The remainder of the feet, however, with the trimmed heads and various other minor parts and trimmings, are subjected to processes of treatment by means of which tallow, glue, neatsfoot oil and other minor products are extracted. The residue after such treatment is used for fertilizer. The blood of cattle and various soft parts not containing other valuable material are also converted into fertilizers. The leading packers manufacture a great variety of commercial fertilizers, including those in which phosphates and other mineral substances are combined with the animal products.

The only remaining by-products of any importance are those derived from the intestines, which are carefully cleaned and converted into casings for sausages and other similar products. The weasand, or gullet, and the biadder are also cleaned and made into containers for various commodities, some weasands, for instance, being used for packing snuff.

Onion Growing Under Cover.

We would suggest to those who are growing Bermuda onions, where mulching material is to be had, to test this method described in an article which we found in the Tri-State Farmer.

This topic is suggested by the query just answered in regard to fall sowing of onions. Mulching tests for various vegetables have been made at the Nebraska experiment station, for two or three years past, and in most instances the mulch has proven beneficial enough to warrant it being practical for the busy farmer. Here are the results of the test of mulched onions last year: Twelve rows 100 feet long were planted in each of two plats side by side. These were started by sowing seed in boxes early in March and partially forced in the hot bed. They were then transplanted in the field plats in April or when the plant was four to six inches high. Two varieties were grown in each plat—Prize Taker and Red Wetherfield. Both plats were cultivated twice with wheel hoe and hand weeded once—just before the mulching, which was applied about June 10.

The work of placing the mulch (old wheat straw), on the one plat about balanced the work of cultivating and weeding the other plat for the balance of the season. Both plats were harvested in September and measures taken by weight. The heaviest yield was of mulched Prize Takers—579 bushels per acre. The per cent of gains for the mulched plat over the cultivated plat was as follows: Prize Taker, 12.4 per cent; Red Wetherfield, 10.4 per cent. The onions were all of large, even size and sold on the Lincoln market at top prices—70 cents per bushel, wholesale. Last year being a wet season the gains of mulching were not as great as they would be in a dry season. Where material for mulch is easily obtained it will pay to use it in the onion bed.

Mr. E. L. Evans, who makes a study of the orange, has recently discovered a new enemy in this section to the orange tree. It is a borer that digs through the bark and into the trunk an inch or two, making a hole as large as the head of a pin, and kicking out a stream of fine sawdust. The borer covers the trunk with these punctures until it finally girdles the tree, causing it to die. While examining a tree where the borer was at work, in company with Mr. Evans and Walter Langford, the little live gimlet was discovered. He proved to be a quarter inch in length, and looked like a small beetle. A sure way to detect this new orange tree enemy at work, is to look for the saw dust at the base of the tree.—Fort Myers Press.